



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

HC

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/678,423	10/02/2000	John M Boyd	LAM2P206	4367

7590 06/18/2003  
Albert S Penilla  
Martine Penilla & Kim LLP  
710 Lakeway Drive  
Suite 170  
Sunnyvale, CA 94085

EXAMINER

SHAKERI, HADI

ART UNIT	PAPER NUMBER
----------	--------------

3723

DATE MAILED: 06/18/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

EC

# Office Action Summary

Application No.

09/678,423

Applicant(s)

BOYD ET AL.

Examiner

Hadi Shakeri

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 12-14, 16-18, 25, 26 and 28-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 and 26 is/are allowed.
- 6) ☒ Claim(s) 12-14, 16-18 and 28-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 19 July 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

Art Unit: 3723

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

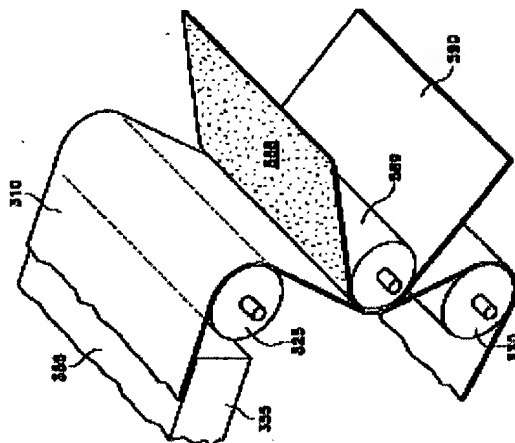
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

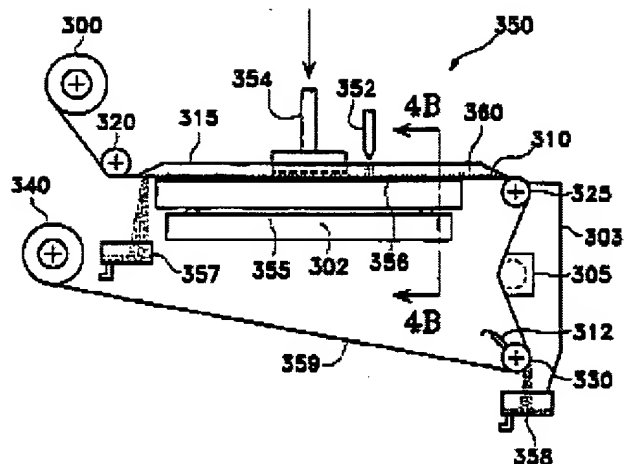
2. Claims 12-14 and 16-18, 28-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Donohue et al.

Donohue et al. discloses all the limitations of claim 12, i.e., a fixed abrasive pad (310), a web dressing media (590) having a contact surface defined between a first point and a second point (edges of the web), a feed roller, a take up roller (not shown, col. 17, line 30-45); a pressure application plate (589) applied to a surface opposite the contact surface. Wherein the pad is configured to move continuously in one direction, (embodiments with endless pad, col. 5, line 8, even though an indexing media would also meet the limitation, i.e., continuously moving in one direction during "operation"), and wherein the media is polished prior to applying a wafer, e.g., col. 19, lines 41-44.



Art Unit: 3723

regarding claim 28, a first roller (320), a second roller (325) being aligned along a horizontal plane, a pad belt (310) configured to be wrapped around the rollers having top and bottom horizontal planes parallel to the rollers plane and application device for applying a web dressing media (embodiment shown above).

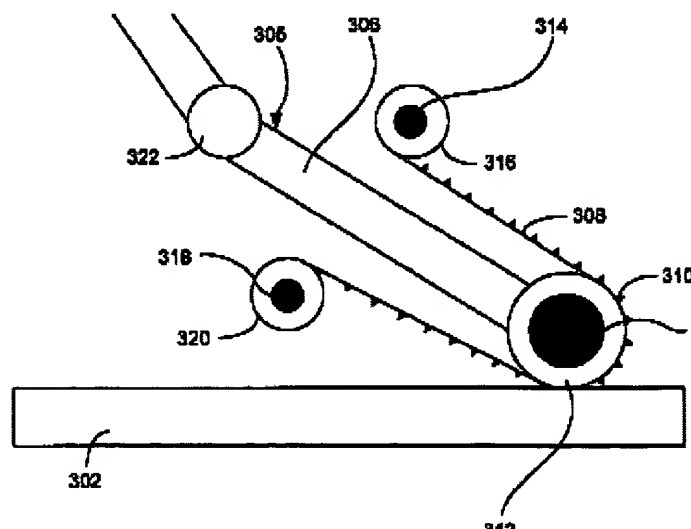


Regarding claim 36, wherein the pad is circular, Fig. 31, (842).

Regarding claims 13, 14, 16-18, 29-35 and 35-41, Donohue et al. as indicated in the previous Office Actions meets the limitations and since feed roller and take up rollers would inherently be on the same side as the application device.

3. Claims 36-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagahara et al.

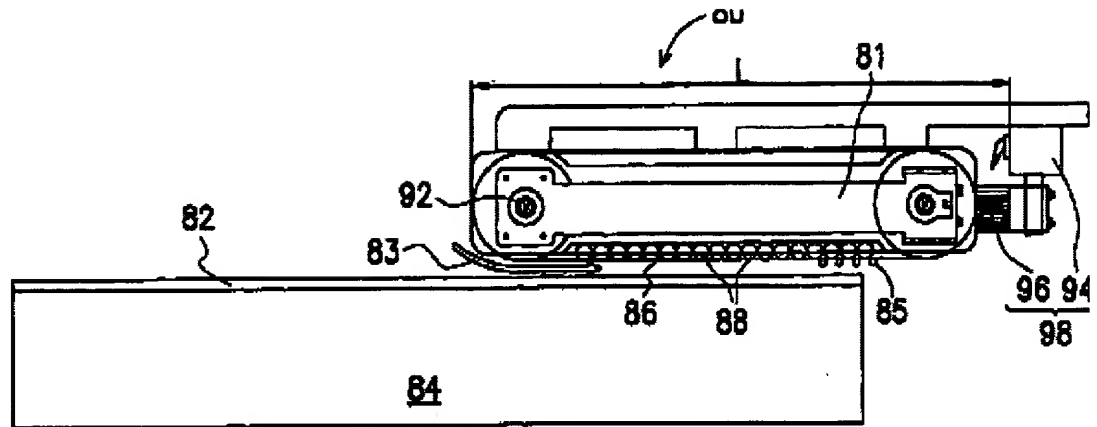
Nagahara et al. discloses all the limitations of the above claims, i.e., a polishing disk (302) a pressure application member (311) defined above the pad configured to apply a web dressing media (308) to the surface of the disk having feed and rake-up rollers defined above the disk having a stabilization member with an application arm.



Art Unit: 3723

4. Claims 36-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu, US Patent No. 6,062,955

Liu  
discloses all the  
limitations of the  
above claims, i.e.,  
a polishing disk  
(82) a pressure  
application



member defined above the pad configured to apply a web dressing media (86) to the surface of the disk having feed and rake-up rollers defined above the disk having a stabilization member with an application arm.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-14 and 16-18, 28-35 rejected under 35 U.S.C. 103(a) as being unpatentable over either Nagahara or Liu in view of Applicants Admitted Prior Art.

Both Nagahara and Liu, each meet all the limitations of the above claims except for disclosing applying the invention to a closed loop, endless or indexed polishing pad. As admitted by the Applicant a typical polishing pad in the CMP process includes a fixed abrasive polishing belt as disclosed in Fig. 1. It would have been obvious to one of ordinary skill in the

Art Unit: 3723

art, at the time the invention was made, to apply the inventions of either Nagahara or Liu to a fixed abrasive belt since a fixed abrasive polishing belt is typically used in CMP as admitted by the applicant.

***Allowable Subject Matter***

7. Claims 25 and 26 are allowed.

***Response to Arguments***


8. Applicant's arguments filed 05/27/03 have been fully considered but they are not persuasive.

In response to applicant's argument that Donohue does not disclose all the limitations, it is noted that as indicated above, the limitation of "to move continuously in "operation" in one direction is and conditioning prior to wafer application is met by Donohue.

***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279, FAX (703) 746-3279 for unofficial documents. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM. Official documents may be faxed to (703) 872-9302, after final to (703) 872-9303.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.

  
HADI SHAKERI  
PATENT EXAMINER

June 13, 2003